

# Thousand Hills Woodland

## Conservation Opportunity Area



Central Dissected  
Till Plains



*Many of Missouri's "forests" are actually woodlands that have overgrown and shaded out the complex understory of woodland grasses and wildflowers.*

Missouri Department of Conservation

Looking over this northern Missouri landscape, it's easy to imagine why residents refer to the area as "thousand hills." Gently rolling hills and steep, rugged inclines can be found in this patchwork of forests, woodlands and grassy meadows.

The formation of this landscape began when glaciers retreated and left the land covered with a thick layer of soil. Ridges and valleys formed as rivers and streams cut down into the earth, dissecting the land and forming "thousands of hills."

The Thousand Hills Woodland Conservation Opportunity Area (COA) contains one of the largest tracts of timbered habitat in northern Missouri. Significant tracts have good woodland restoration potential and still support remnant populations of woodland plants. Additionally, this

wooded landscape represents a significant resource for woodland birds, including great-crowned flycatchers, red-headed woodpeckers, eastern wood pewees and summer tanagers.

Historically, the Thousand Hills Woodland COA consisted of a complex mosaic of narrow ridgetop prairies and savannas grading into oak woodlands on upper slopes, with forests on protected slopes and bottoms. Presently, the landscape is more than 60 percent forested. Most of these forests are closed-canopied, second-growth forests, but significant acreages on upper slopes and ridgetops still retain woodland features. Much of the remaining landscape has been cleared for pastures dominated by non-native grasses, especially tall fescue.

## Thousand Hills Woodland Conservation Strategies

- Manage 3,600 acres of public land for forest, woodland and savanna natural communities.
- Restore woodland and savanna natural communities on private lands.
- Initiate a public outreach effort to inform landowners and the public about woodland restoration; discourage conversion of wooded land to other uses.
- Acquire key parcels adjoining existing public lands.
- Control invasive exotic plants, including autumn olive and sericea lespedeza.
- Promote the management of prairie remnants.



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*Thinning forests is one method to help restore overgrown woodland landscapes. Opening the canopy allows sunlight to reach the ground, necessary for many woodland grasses and wildflowers.*

### Priority Research and Inventory Needs

- Identify and prioritize specific tracts with high potential for woodland and savanna restoration.
- Assess the threat of exotic plant species to the proposed restorations; develop management strategies if appropriate.
- Conduct a literature review to determine the effect of fire on the commercial value of trees.
- Survey for Indiana bats.
- Survey landowners to determine objectives for their property; work with them to identify appropriate management strategies and compatible economic opportunities.

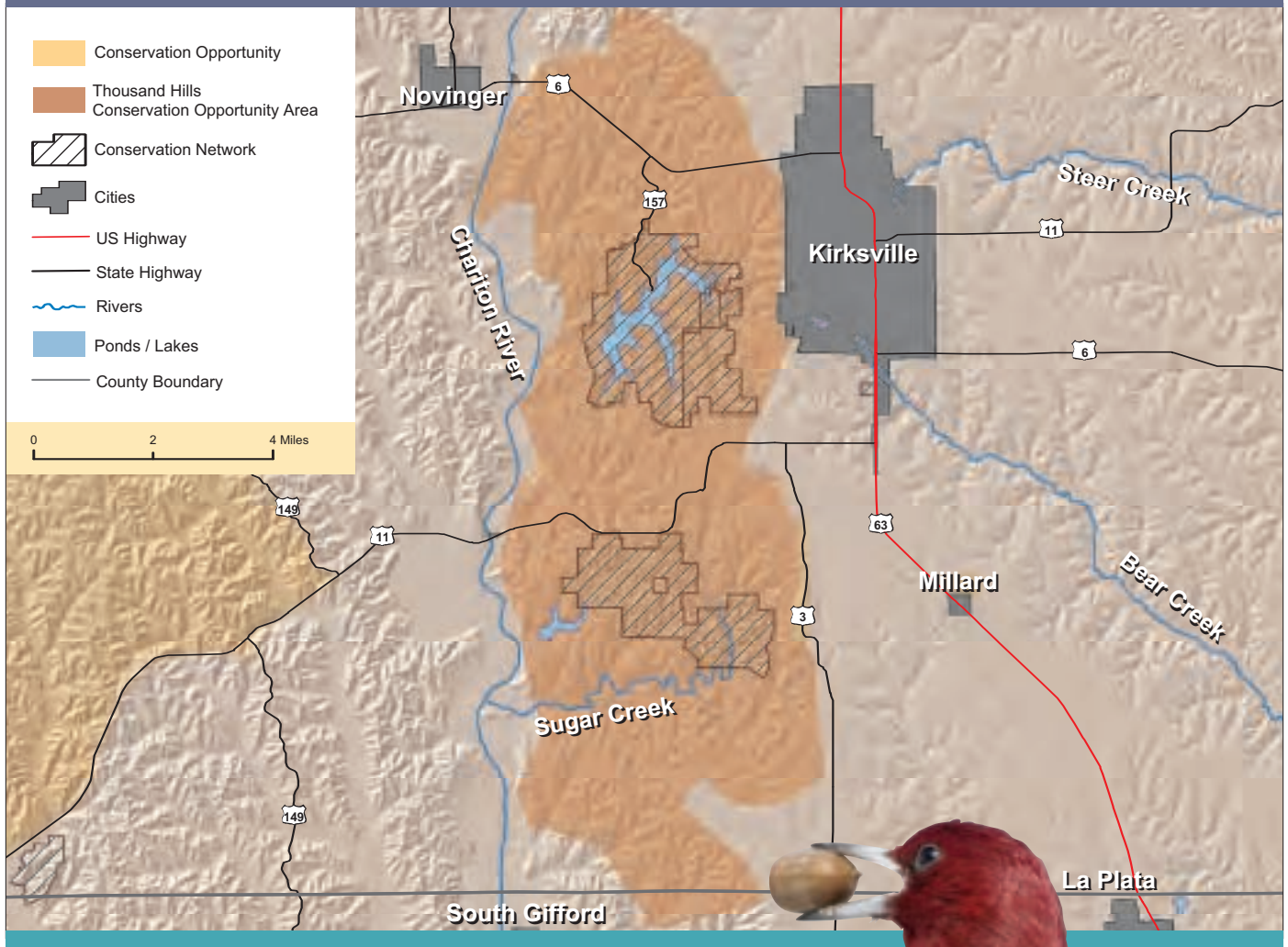
### Conservation Partners

**Existing:** Truman State University; private landowners; Missouri Department of Natural Resources (DNR); Missouri Department of Conservation (MDC)

**Potential:** National Wild Turkey Federation (NWTf); Missouri Prairie Foundation; The Nature Conservancy – Missouri Chapter; Audubon Missouri; Missouri Bird Conservation Initiative (MoBCI); Midwest Invasive Plant Network; Missouri Conservation Heritage Foundation (MCHF); private landowners; U.S. Fish and Wildlife Service (USFWS); Natural Resources Conservation Service (NRCS)



# Thousand Hills Woodland Conservation Opportunity Area



## Funding Sources

**Existing:** DNR annual budget; MDC annual budget; MDC State Wildlife Grants; MDC Wildlife Diversity Funds

**Promising Future Sources:** USFWS Partners for Fish and Wildlife Program; NWTF Wild Turkey Super Fund; MoBCI Grants; NRCS Wildlife Habitat Incentive Program; MDC Landowner Incentive Program; National Fish and Wildlife Federation Grants; MCHF Grants

## Existing Conservation Network

Thousand Hills State Park; Big Creek Conservation Area; Sugar Creek Conservation Area

*The red-headed woodpecker is the characteristic woodpecker of woodlands. Woodpeckers create nesting cavities in woodland trees. These cavities are later used by other birds and animals.*

Jim Rathert, Missouri Department of Conservation



## Prescribed Fire – a Tool for Healthy Woodlands



*Woodlands need periodic fires to maintain their openness. Prescribed burns recreate fires that once swept through from nearby prairies.*

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### Conservation Challenges

The Thousand Hills Woodland Conservation Opportunity Area contains one of the largest blocks of woodland in northern Missouri. Unfortunately, many of the landscape's savannas and woodlands have succeeded to a closed canopy

in the absence of fire. Potential challenges to conservation success include the difficulty of applying prescribed fire (especially on private lands), an increasing number of small residential properties and a lack of staff time and funding.

To learn more about the Thousand Hills Woodland Conservation Opportunity Area, please contact:



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